

314 CMR 20.00: RECLAIMED WATER PERMIT PROGRAM AND STANDARDS
Section

- 20.01: Purpose and Authority
- 20.02: Definitions
- 20.03: Permit Requirements for Reclaimed Water Systems
- 20.04: Public Notice Requirements for Reclaimed Water
- 20.05: Additional Requirements for Reclaimed Water Systems
- 20.06: Requirements for the Use, Sale, Distribution or Offering for Use, Sale or Distribution of Reclaimed Water
- 20.07: Activities Not Requiring a Permit Under 314 CMR 20.00 or 314 CMR 5.00
- 20.08: Effect of a Permit
- 20.09: Restrictions on the Issuance of a Permit
- 20.10: Application for a Permit For a Reclaimed Water System
- 20.11: Required Submissions for Reclaimed Water Permit Applications
- 20.12: The Engineering Report
- 20.13: Requirements for Reclaimed Water Systems for Irrigation
- 20.14: Requirements for Privately Owned Reclaimed Water Systems
- 20.15: Signatories to Permit Applications, Reports and other Submittals
- 20.16: Continuation of an Expiring Permit that was issued by the Department pursuant to 314 CMR 20.00.
- 20.17: Special Permit Conditions
- 20.18: General Permit Conditions
- 20.19: Modification, Transfer, Suspension, Revocation and Renewal of Reclaimed Water System Permits Issued by the Department Pursuant to 314 CMR 20.00
- 20.20: Appendix A

20.01: Purpose and Authority

Pursuant to M.G.L. c. 21, §§ 26, 27, and 43, the Department promulgates these regulations to establish a program to regulate and permit reclaimed water systems. These regulations also establish requirements for the use, sale, distribution, and offering for use, sale, and distribution of reclaimed water.

20.02 Definitions

As used in 314 CMR 20.00, the following words have the following meaning:

Aquifer - a geological formation, group of formations or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Best Management Practices or BMPs - schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of waters of the Commonwealth. BMPs include treatment requirements, operating procedures and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal or drainage from raw material storage.

Blackwater- wastewater from toilets, urinals, and any drains equipped with garbage grinders.

Bypass - the diversion of wastes from any portion of a treatment works.

Confined disposal facility- a facility created in open water or wetlands consisting of confinement walls or berms built up or extending into existing land and is a “confined disposal facility” as defined in 314 CMR 9.02.

Cross Connection - any actual or potential physical connection or arrangement between a pipe conveying potable water from a public water system and any non potable water supply piping arrangement or equipment including but not limited to waste pipe, soil pipe, sewer, drain or other sources of potable water not approved by the Department as a source for a public water system. For purposes of 314 CMR 20.00, a cross connection shall also include a physical connection between the reclaimed water system and any interior or exterior pipes conveying reclaimed water and a potable water system and any interior or exterior pipes conveying potable water supply including pipes conveying potable water from a private well.

Department - the Massachusetts Department of Environmental Protection.

Discharge or Discharge of Pollutants- any addition of any pollutant or combination of pollutants to waters of the Commonwealth from any source including but not limited to discharges from surface runoff which are collected or channeled by man; discharges through pipes sewers or other conveyances owned by a state, municipality or other person, which do not lead to POTWs and discharges through pipes or other conveyances leading into privately owned treatment works. This term does not include an addition of pollutants by any indirect discharger.

Disposal Site - a structure, well, pond, lagoon, impoundment, ditch, landfill or other place or area, excluding ambient air or surface water, where uncontrolled oil or hazardous material has come to be located as a result of any spilling, leaking, pouring, ponding, emitting, emptying, discharging, injecting, escaping, leaching, dumping, discarding or otherwise disposing of such oil or hazardous material and is a “disposal site” as defined in M.G.L. c. 21E.

Effluent – discharge of pollutants into the environment whether or not treated.

Effluent Limitation or Effluent Limit - any requirement, restriction, or standard imposed by the Department on quantities, discharge rates, and concentrations of pollutants discharged from point sources into waters of the Commonwealth, to a publicly owned treatment works or to a reclaimed water distribution system so that so that it may be used as reclaimed water in accordance with 314 CMR 20.00.

Environmental Protection Agency or EPA - the United States Environmental Protection Agency.

Facility or Facilities - any and all devices, processes and properties real or personal used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation or reuse of water borne pollutants but not including any works receiving a hazardous waste from off the site of the works for the purpose of treatment, storage or disposal.

Federal Act, the Clean Water Act, 33 U.S.C. 1251 et seq.

Greywater – Any putrescible wastewater discharged from domestic activities including but not limited to washing machines, sinks, showers, bath tubs, dishwashers, or other source except toilets, urinals and any drains equipped with garbage grinders.

Ground Water - water below the land surface in a saturated zone, including perched ground water.

Industrial Waste - any liquid, gaseous, or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade, or business or from the development or recovery of any natural resources.

Interim Wellhead Protection Area (IWPA) - an interim wellhead protection area as defined in 310 CMR 22.02. Generally this is a one half mile radius from the well or well field for sources whose approved pumping rate is 100,000 gallons per day or greater. For smaller sources, the radius in feet is determined by multiplying the approved pumping rate in gallons per minute by 32 and adding 400.

Land uses with higher potential pollutant loads-the following land uses are land uses with higher potential pollutant loads: land uses identified in 310 CMR 22.20B(2); 310 CMR 22.20C(2)(a)-(k) and (m), 310 CMR 22.21(2)(a)(1) - (8), and 310 CMR 22.21(2)(b)(1) - (6), areas within a site that are regulated by an individual National Pollutant Discharge Elimination System (NPDES) stormwater permit or the NPDES Multi-Sector General Permit; auto fueling facilities (gas stations); exterior fleet storage areas; exterior vehicle service and equipment cleaning areas, marinas and boatyards; parking lots with high intensity use; confined disposal facilities and disposal sites.

Local Government Unit -a town, city, district, commission, agency, authority, board or other instrumentality of the commonwealth or any of its political subdivisions including a regional government unit.

Massachusetts Water Quality Standards - the Massachusetts Surface Water Quality Standards (314 CMR 4.00).

Milligrams Per Liter or mg/l – the weight in milligrams of any specific substance or substances contained in one liter of solution.

Nephelometric Turbidity Unit (NTU) – measurement of turbidity as measured by the ratio of intensity of light scattered by the sample to the intensity of incident light as measured by method 2130 B in “Standard Methods for the Examination of Water and Wastewater”,

On-Site Subsurface Sewage Disposal System – a system or series of systems for the treatment or disposal of sanitary sewage below the ground in accordance with 310 CMR 15.000.

Permit - an authorization issued pursuant to M.G.L. c. 21, § 43 and 314 CMR 2.00, 3.00, 5.00, 7.00 or 20.00 to implement the requirements of M.G.L. c. 21, §§ 26 through 53, the Clean Water Act, 33 U.S.C. § 1251 et seq and the NPDES regulations, 40 CFR Part 122.

Person - any agency or political subdivision of the Commonwealth, the Federal government, any public or private corporation or authority, individual, partnership or association, or other entity, including any officer of a public or private agency or organization, upon whom a duty may be imposed by or pursuant to any provisions of M.G.L. c. 21, §§ 26 through 53.

Pollutant - any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter, in whatever form and whether originating at a point or major non-point source, which is or may be discharged, drained or otherwise introduced into any sewerage system, treatment works or waters of the Commonwealth.

Potable Waters – waters usable for drinking, hand washing, culinary or food processing purposes.

Potable Water System - a system for conveying potable water so that it may be used.

Pretreatment - the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutants properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW.

Privately owned reclaimed water system – a privately owned treatment works that treats sewage so that it may be reclaimed, recycled or reused in accordance with 314 CMR 20.00. A privately owned reclaimed water system may include a reclaimed water distribution system.

Processed Food Crop – any crop that, prior to sale to the public or others, has undergone chemical or physical processing sufficient to kill pathogens.

Publicly Owned Treatment Works or POTW - any device or system used in the treatment and disposal (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature, which is owned by a local government unit. A POTW includes any sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Reclaimed Water – wastewater that has been treated so that it is suitable for beneficial reuse in accordance with 314 CMR 20.00.

Reclaimed Water Distribution System – a system that distributes reclaimed water so that it may be reused in accordance with 314 CMR 20.00.

Reclaimed Water System –a treatment works that includes facilities for treating wastewater so that it may be beneficially reused in accordance with 314 CMR 20.00. A reclaimed water system may be a privately owned treatment works that treats sewage only or a POTW.

Recreational Impoundment – a man-made impoundment of reclaimed water for fishing, boating and other non-body contact recreational uses.

Residential Uses or Residential Developments-apartment buildings, townhouses, condominiums, cooperatives, single family homes, two and three family homes, hospitals, nursing, homes, assisted living facilities, rehabilitation facilities, dormitories, and homeless shelters. Residential uses do not include hotels and motels.

Reuse Site- a site where reclaimed water is being used.

Satellite Reclaimed Water System - a system for the distribution, use, sale, offering for distribution, sale, and use of reclaimed water in accordance with 314 CMR 20.00 that does not include any facilities for wastewater treatment.

Sewage – greywater or blackwater or a combination of greywater and blackwater from domestic, commercial or other non-industrial sources. Sewage does not include stabilized wastes.

Sewer System - pipelines or conduits, pumping stations, force mains, and all other structures, devices, appurtenances, and facilities used for collecting and conveying wastes to a site or works for treatment or disposal.

Soil Absorption System- a system of trenches, galleries, chambers, pits, fields or beds or any other disposal area approved in writing by the Department together with effluent distribution lines and aggregate, which receives effluent from a treatment works.

Stormwater-stormwater runoff, snow melt runoff, surface runoff, and drainage.

Treatment Works - any and all devices, processes and properties, real or personal, used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation or reuse of waterborne pollutants, but not including any works receiving a hazardous waste for the purpose of treatment, storage or disposal.

Uncontaminated Water –water which does not contain dredge spoil, solid waste, incinerator residue, garbage, sewage, sludge, munitions, chemical wastes, biological waste materials, radioactive materials, wrecked or discarded equipment, cellar dirt, industrial, municipal or agricultural waste or any other material upon which discharge could cause a violation of applicable water quality standards.

Wastewater - sewage, industrial waste, other wastes or any combination of the three.

Waters of the Commonwealth - all waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries,

wetlands, coastal waters, ground waters and vernal pools.

Zone I – the protective radius required around a public water supply well or wellfield, as defined 310 CMR 22.02. For public water supply system wells with approved yields of 100,000 gallons per day or greater, the protective radius is 400-feet. Tubular well fields require a 250-foot protective radius. Protective radii for all other public water system wells are determined by the following equation: Zone I radius in feet = $[150 \times \log \text{ of pumping rate in gpd}] - 350$.

Zone A – the land between a surface water source and the upper boundary of the bank as defined in 310 CMR 22.02, to include the land within a 400 foot lateral distance from the upper boundary of a bank of a Class A surface water source as defined in 314 CMR 4.05(3)(a), and the land within a 200 foot lateral distance from the upper boundary of the bank of a tributary or associated surface water body.

Zone II the area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions, that can realistically be anticipated as defined in 310.CMR 22.00.

20.03 Permit Requirements for Reclaimed Water Systems

(1) Except as otherwise provided in 314 CMR 20.03 and 20.07, no person shall construct, install, modify, operate or maintain a reclaimed water system and use, sell, distribute or offer for use, sale or distribution the reclaimed water produced by said system without a currently valid permit issued by the Department pursuant to 314 CMR 5.00 or 314 CMR 20.00 and a Reuse Management Plan approved by the Department. The construction, installation, operation, and maintenance of a treatment works that treats wastewater so that the it may be discharged to the ground in accordance with 314 CMR 5.00 and/or used as reclaimed water requires a permit issued by the Department pursuant to 314 CMR 5.00.

All other treatment works that treat wastewater so that it may be used as reclaimed water require a permit issued by the Department pursuant to 314 CMR 20.00. Any person who proposes to construct, install, modify, operate, or maintain a reclaimed water system and use, sell, distribute or offer for use, sale or distribution the reclaimed water produced by said system may obtain a permit by submitting a Reuse Management Plan, and the appropriate forms in accordance with 314 CMR 2.00 and 314 CMR 5.00 or 314 CMR 20.00, whichever is applicable. If the applicant proposes to sell or distribute the reclaimed water for use by other parties or offer the reclaimed water for use, sale, or distribution by other parties, the application shall include a Service and Use Agreement. The application shall also include all information required by 314 CMR 20.11 through 314 CMR 20.15.

(2) A Reuse Management Plan is a plan that includes a description of the proposed reclaimed water volume, the proposed class of the reclaimed water, a description of the reclaimed water distribution system, and the location of each reuse site. For each reuse site, the Reuse Management Plan shall specify the party responsible for managing the use, the proposed reuse volume, the nature of the proposed reuse, and the means by which the reclaimed water will be distributed and used. For each reuse site, the Reuse Management Plan shall also describe the procedures for ensuring compliance with all applicable requirements of 314 CMR 20.00 and the

Massachusetts Uniform Plumbing Code, 248 CMR 10.00, including without limitation, the procedures for informing the public that reclaimed water is being used as provided in 314 CMR 20.04. The Reuse Management Plan shall also describe the procedures for implementing at each reuse site a cross connection control inspection and testing program that contains all the components of a cross connection program established pursuant to 310 CMR 22.22 and that ensures compliance with the Massachusetts Uniform Plumbing Code, 248 CMR 10.00, at each reuse site. The Reuse Management Plan shall also detail the procedures for ensuring that a registered cross connection prevention device or cross connection control method that meets the requirements of 310 CMR 22.22 and the Massachusetts Uniform Plumbing Code, 248 CMR 10.00, be provided at all potable water system connections to reuse sites.

(3) A Service and Use Agreement is an agreement between the entity or person who has a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 or 314 CMR 5.00 and any other entity or person(s) who use, sell, distribute or offer for use, sale or distribution the reclaimed water produced by said system. The Service and Use Agreement shall identify the class of the reclaimed water, the use of the reclaimed water, and the reuse site(s). The Service and Use Agreement shall provide that the use of the reclaimed water shall comply with 314 CMR 20.00, the relevant provisions of the applicable permit, the approved Reuse Management Plan and the Massachusetts Uniform Plumbing Code 248 CMR 10.00. The Service and Use Agreement shall further provide that all equipment required for the use and/or distribution of the reclaimed water shall be properly operated and maintained. The Service and Use Agreement shall include a condition granting the permittee and the Department the right to inspect any area where reclaimed water is being used for the purpose of assessing compliance with 314 CMR 20.00. The Service and Use Agreement shall provide for the termination of the use and/or distribution of the reclaimed water, if the reclaimed water is used and/or distributed in a manner that violates 314 CMR 20.00, the permit, or the approved Reuse Management Plan. The Service and Use Agreement shall require that the public at each reuse site be notified in accordance with 314 CMR 20.04 that reclaimed water is being used and that a cross connection control device or cross control method that meets the requirements of 310 CMR 22.22 and the Massachusetts Uniform Plumbing Code, 248 CMR 10.00, be installed and maintained at all potable water system connections at each reuse site.

(4) Notwithstanding the provisions of 314 CMR 20.03(1), a person may discharge reclaimed water within a Zone II, Interim Wellhead Protection Area or an area that is outside the service area of a public water system in accordance with 314 CMR 5.00 and a ground water discharge permit issued by the Department and thereby use reclaimed water to recharge an aquifer without a Reuse Management Plan approved by the Department.

(5) Notwithstanding the provisions of 314 CMR 20.03(1), a person may use reclaimed water for irrigation by means of a subsurface soil absorption system approved by the Department in accordance with 314 CMR 5.00 and a ground water discharge permit issued by the Department without a Reuse Management Plan approved by the

Department.

(6) Except as otherwise provided herein, all permits issued by the Department pursuant to 314 CMR 5.00 or 314 CMR 20.00, authorizing the construction, installation, modification, operation and maintenance of a reclaimed water system and the use, sale, distribution or offering for use, sale or distribution of the reclaimed water system shall establish requirements for the treatment, distribution, and/or use of the reclaimed water in accordance with 314 CMR 20.00 including without limitation the conditions set forth in 314 CMR 20.18 and 314 CMR 20.19. Notwithstanding the foregoing, a reclaimed water system that was authorized by a ground water discharge permit issued by the Department prior to *date* (the effective date of the regulations) may have requirements for the operation and maintenance of the reclaimed water system, and the treatment, use, sale, or distribution of the reclaimed water produced by said system and/or the offering of said reclaimed water for use, sale or distribution based on the Department's Interim Guidelines on Reclaimed Water effective January 3, 2000 rather than 314 CMR 20.00. The Department may modify any ground water discharge permit that has requirements based on the Department's Interim Guidelines on Reclaimed Water to include additional conditions in accordance with 314 CMR 20.00 and/or 314 CMR 5.00 when the ground water discharge permit is renewed or at any other time, that the Department determines such additional conditions are necessary for the protection of the public health or the environment.

20.04: Public Notice Requirements for Reclaimed Water

(1) All areas on a site where reclaimed water is being used that are accessible to the public, such as reclaimed water valves, storage facilities, and outlets, shall be posted with signs that are visible to the public clearly communicating that the water is not for drinking. The signage shall be colored purple with white or black lettering and shall include the following wording: "NOTICE: RECLAIMED WATER – DO NOT DRINK". An example of such a sign is included in Appendix A. Signs shall be in English and any additional locally employed language.

(2) All reclaimed water plumbing and out-of-sight fixtures shall be color coded purple to identify the source of the water as being reclaimed water.

(a) All reclaimed water piping and appurtenances shall be colored purple and embossed or integrally stamped or marked: "NOTICE: RECLAIMED WATER – DO NOT DRINK". The warning shall be stamped on opposite sides of the pipe and repeated every three feet or less.

(b) Other pipe and construction warning markings may be acceptable to the Department provided the colors and messages are consistent with 314 CMR 20.04 (2)(a).

(3) The permittee shall comply with 310 CMR 20.04(1) and (2) at all reuse sites under the direct control of the permittee. For sites not under the direct control of the permittee, the Service and Use Agreement shall require compliance with 310 CMR 20.04 (1) and (2), and the permittee shall enforce this requirement.

20.05 Additional Requirements for Reclaimed Water Systems

A reclaimed water system shall comply with all applicable requirements of the Massachusetts Uniform Plumbing Code, 248 CMR 10.00. There shall be no cross connections between a reclaimed water system and a potable water system. Hose bibs shall not be used on any portions of a reclaimed water system that are accessible to the public. Only quick couplers that are different from those used on the potable water system shall be used on the portions of a reclaimed water system that are accessible to the public.

20.06 Requirements for the Use, Sale, Distribution or Offering for Use, Sale or Distribution of Reclaimed Water

(1) No person may use, sell, distribute or offer for use, sale, or distribution reclaimed water produced by a reclaimed water system operated by another party without a permit, unless said use, sale and distribution and or offering for use sale or distribution complies with 314 CMR 20.00, a Reuse Management Plan approved by the Department, and a Service and Use Agreement approved by the Department.

(2) Except as otherwise determined by the Department when approving a Reuse Management Plan, reclaimed water may be beneficially used only for the following purposes: irrigation, a source of water for recreational use, industrial or commercial cooling or air conditioning, toilet and urinal flushing, agricultural use, the creation of wetlands, commercial laundries, carwashes, industrial boiler feed, silviculture, snowmaking, fire protection, dust control, soil compaction, street cleaning, and aquifer recharge. Reclaimed water may be used for irrigation by means of a subsurface soil absorption system approved by the Department pursuant to 314 CMR 5.00 or by discharging reclaimed water to the ground within 100 feet of a well used for irrigation in accordance with a permit issued by the Department pursuant to 314 CMR 5.00. Reclaimed water may be used for aquifer recharge by discharging reclaimed water to the ground within the Zone II or Interim Wellhead Protection Area of a public water system or within an area that is outside the service area of a public water system.

(3) Reclaimed water shall not be used or distributed within the Zone I of a public water supply well, the Zone A of a surface water source for a public water system or within 100 feet of a private drinking water well.

(4) Reclaimed water shall not be used or distributed in a manner that causes or contributes to violations of the Surface Water Quality Standards 314 CMR 4.00.

(5) Reclaimed water shall not be used or distributed in a manner that causes the water quality of any public or private source of potable water to violate the standards set forth in the Drinking Water Regulations of Massachusetts, 310 CMR 22.00.

(6) Any person who uses or distributes reclaimed water shall comply with all applicable requirements of the Massachusetts Uniform Plumbing Code, 248 CMR 10.00.

(7) The Department may request any person to provide information as the Department may reasonably require to determine whether that person is subject to M.G.L. c. 21, §§ 26-53 or 314 CMR 20.00. Any person who uses, sells, or distributes reclaimed water or offers reclaimed water for use, sale or distribution shall allow the Department to inspect any area where reclaimed water has been or is being used, sold, distributed or offered for use sale or distribution for the purpose of assessing compliance with 314 CMR 20.00.

20.07 Activities Not Requiring a Permit Under 314 CMR 20.00 or 314 CMR 5.00

The following activities do not require a permit under 314 CMR 20.00 or 314 CMR 5.00:

- (1) The construction, installation, modification, operation, and maintenance of an on-site subsurface sewage disposal system that is constructed installed, operated and maintained in accordance with 310 CMR 15.000 including without limitation an on-site subsurface sewage disposal system that provides for the reclamation, recycling or reuse of greywater, an alternative system that has a soil absorption system that provides drip irrigation, a system that provides aquifer recharge by discharging effluent within a Zone II, Interim Wellhead Protection Area, or an area that is outside the service area of a public water supply, or a system that discharges effluent to a soil absorption system located within 100 feet of an irrigation well;
- (2) The construction, installation, modification, operation, and maintenance of a satellite reclaimed water system, provided that the satellite reclaimed water system is constructed, installed, modified, operated and maintained in accordance with 314 CMR 20.00, a Reuse Management Plan is approved by the Department and a Service and Use Agreement is approved by the Department;
- (3) The construction, installation, modification, operation, and maintenance of a system that manages stormwater so that it may be used for irrigation provided that the stormwater is protected from exposure to any land uses with higher potential pollutant loads; and
- (4) The construction, installation, modification, operation, and maintenance of a system that manages uncontaminated water so that it may be beneficially used including, without limitation, a system that uses uncontaminated runoff from non-metal roofs for toilet flushing in accordance with the requirements of the Massachusetts Uniform Plumbing Code, 248 CMR 10.00.

20.08: Effect of a Permit

Issuance of a reclaimed water system permit by the Department pursuant to 314 CMR 20.00 shall be deemed to allow, to the extent specified in the permit, the permittee to construct, install, modify, operate and maintain a reclaimed water system in accordance with the permit and 314 CMR 20.00 and to use, sell, distribute, and offer for use, sale or distribution the reclaimed water produced by said reclaimed water system in accordance with the permit, an

approved Reuse Management Plan and 314 CMR 20.00. Issuance of a reclaimed water system permit by the Department pursuant to 314 CMR 5.00 shall have the effect specified in 314 CMR 5.07. The issuance of a reclaimed water system permit pursuant to 314 CMR 5.00 or 20.00 shall not be deemed to authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State and local laws and regulations.

20.09 Restrictions on the Issuance of a Permit

- (1) Except as provided in 314 CMR 5.00, the Department shall not issue a permit for the use of stormwater that has come into contact with any land uses with higher potential pollutant loads.
- (2) The Department shall not issue a permit under 314 CMR 5.00 or 314 CMR 20.00 authorizing the use of reclaimed water in a manner that will cause or contribute to violations of the state's surface water quality standards or that will cause the water quality of a private or public source of potable water to violate the standards set forth in the Drinking Water Regulations of Massachusetts, 310 CMR 22.00.
- (3) The Department shall not issue a permit under 314 CMR 5.00 or 20.00 authorizing the use of reclaimed water within the Zone I of a public ground water source of potable water, the Zone A of a public surface water source of potable water, or within 100 feet of a private drinking water well.

20.10: Application for a Permit for a Reclaimed Water System

- (1) Duty to apply. Any person required to obtain a permit for a reclaimed water system issued shall complete and submit the appropriate form(s) in accordance with 314 CMR 20.03(1), unless otherwise provided in 314 CMR 20.07.
- (2) Who must apply. The owner of an existing treatment works who proposes to operate a reclaimed water system and use, sell, distribute or offer for use, sale or distribution the reclaimed water produced by said system and any person who proposes to construct, install, modify, operate or maintain a reclaimed water system, shall apply for a permit, unless otherwise provided in 314 CMR 20.07. If the reclaimed water system treats wastewater so that it may be used as reclaimed water and/or discharged to the ground, the applicant shall apply for a permit issued by the Department pursuant to 314 CMR 5.00 by following the procedures set forth in 314 CMR 5.09. As set forth in 314 CMR 20.03, all other applicants shall apply for a permit issued by the Department pursuant to 314 CMR 20.00. Applicants seeking a permit for a reclaimed water system that requires a permit issued by the Department pursuant to 314 CMR 20.00 shall follow the procedures and submit the information required by 314 CMR 20.10 through 314 CMR 20.15.
- (3) Time to apply. Any person who is required to apply for a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 and who does not have a currently effective permit shall submit an application at least 150 days before any activity requiring said permit is to commence, unless permission for a later date has been granted by

the Department in writing. To avoid delay, persons proposing to construct, install, modify, operate or maintain a reclaimed water system requiring a permit issued by the Department pursuant to 314 CMR 20.00 are encouraged to submit their applications well in advance of the 150 day requirement.

Any person with a currently effective reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 shall submit an application for a renewal permit at least 150 days before the expiration date of the existing permit unless permission for a later date has been granted by the Department.

(4) Completeness The Department shall not issue a permit for a reclaimed water system pursuant to 314 CMR 20.00 before receiving a complete application as required under 314 CMR 2.03(2).

20.11 Required Submissions for Reclaimed Water Permit Applications

All applications for a permit to construct, install, modify, operate or maintain a reclaimed water system in accordance with 314 CMR 20.00 shall include an Engineering Report, a Reuse Management Plan, and if the applicant proposes that the reclaimed water be used by one or more persons other than the permittee, Service and Use Agreement(s). For permit renewals and modifications, the applicant may update existing documents. All documents other than the Service and Use Agreement(s) shall be completed in accordance with relevant Department design guidelines and shall be prepared, stamped and signed by a Massachusetts Registered Professional Engineer with a concentration in civil, sanitary or environmental engineering and shall be accompanied by a Certification Statement that the documents have been prepared in accordance with Department standards and signed by the Massachusetts Registered Professional Engineer. The documents shall be consistent with 314 CMR 20.00.

20.12 The Engineering Report

- (1) At a minimum, the Engineering Report shall contain a detailed description of the treatment works including the wastewater treatment technology to be employed, the concentration of pollutants in the reclaimed water that is to be produced by the treatment works, and the proposed classification of the reclaimed water. The description shall include information on the sources of water to be treated, flows and loads, number and size of unit processes, appurtenant facilities and a preliminary layout. The Engineering Report shall also provide documentation including without limitation the results of any pilot studies that show that the proposed technology will meet the effluent limits applicable to the proposed classification. The Engineering Report shall include a monitoring plan and a schematic that identifies the proposed locations for monitoring to assess compliance with the applicable requirements.
- (2) At a minimum, the Engineering Report shall document that:
 - (a) The wastewater treatment facilities have been designed in accordance with the latest edition of TR-16: "Guidelines for the Design of Wastewater Treatment

Facilities” prepared by the New England Interstate Water Pollution Control Commission and other applicable Department Guidelines.

(b) To meet the EPA Class I Reliability Standards, the wastewater treatment facilities have been designed to include the following components: (i) Two independent and separate sources of power, with the backup source sufficient to operate all vital components during peak flow conditions, together with critical lighting and ventilation; (ii) Unit redundancy; (iii) Additional storage or bypass to a discharge site as required by the Department pursuant to 314 CMR 20.12(3)-314 CMR 20.12(5); and (iv) Sufficient inventory of spare equipment and parts to minimize the time period that treatment plant operations are off-line.

(c) The wastewater treatment facilities have been designed in accordance with the requirements of the Massachusetts Uniform State Plumbing Code, 248 CMR 10.00.

(3) Except as otherwise provided in 314 CMR 20.12(4) and 314 CMR 20.12(5), a new or expanded reclaimed water system shall be designed and constructed so that the average daily flow may be discharged to a reserve soil absorption system or to a wastewater collection system for transport to other treatment or disposal facilities. Except as otherwise provided in 314 CMR 20.12(4) and 314 CMR 20.12(5), the Engineering Report shall document compliance with this requirement.

(4) An applicant may propose and the Department may permit a new reclaimed water system with a soil absorption system that does not meet the requirements of 314 CMR 20.12(3) provided the Engineering Report contains sufficient information to demonstrate to the Department’s satisfaction that the proposed use of reclaimed water will benefit the overall water balance in a watershed or subwatershed without creating a potential risk to the public health or the environment.

(5) An applicant may propose and the Department may permit an expansion of an existing reclaimed water system that includes a soil absorption system that does not meet the requirements of 314 CMR 20.12(3) provided the Engineering Report contains sufficient information to demonstrate to the satisfaction of the Department that the applicant exercised best efforts to provide a soil absorption system that meets the requirements of 314 CMR 20.12(2) and that use of the reclaimed water system with the proposed soil absorption system will not create a risk to the public health or the environment.

(6) If the proposed reclaimed water system is a POTW, the Engineering Report shall document that the public owned treatment works has a pretreatment program that:

(a) meets the requirements of the Federal Act, M.G.L. c. 21, §§ 26-53, and the regulations promulgated thereunder including without limitation 314 CMR 12.00; and

(b) is adequate to ensure that the reclaimed water produced by the POTW meets the effluent limits associated with the proposed use and classification

of the reclaimed water.

20.13 Requirements for Use of Reclaimed Water For Irrigation

(1) Except as otherwise provided in 314 CMR 20.13(3), an application for a reclaimed water system that treats wastewater so that it may be used for irrigation shall include a public education program and an implementation schedule that provides for annual reporting on the implementation of the program. The education program shall be designed to inform users, residents and plumbing contractors and inspectors who deal with irrigation about the need to:

- (a) Prohibit cross connections between the reclaimed water and potable water systems;
- (b) Clearly and distinctly identify the potable water distribution lines and plumbing from the reclaimed water distribution lines and plumbing;
- (c) Avoid contact with and minimize ponding or runoff of reclaimed water; and
- (d) Comply with all other applicable requirements governing the use of reclaimed water for irrigation, including without limitation, the requirements of 314 CMR 20.14(3) and (4).

(2) The Engineering Report for a reclaimed water system that is designed to produce reclaimed water for irrigation shall document that the irrigation system has been designed to avoid any surface ponding, to insure that spray mist or other runoff does not enter buildings, dwellings, decks, garages, driveways, roads, designated outdoor eating areas or food handling facilities, and to prevent any contact between reclaimed water spray, mist or runoff and a drinking water fountain.

(3) The requirements of 314 CMR 20.13(1) and 314 CMR 20.13(2) shall not apply to a reclaimed water system that provides reclaimed water for irrigation by means of a subsurface soil absorption system approved by the Department pursuant to 314 CMR 5.00.

20.14 Requirements for Privately Owned Reclaimed Water Systems

A person proposing a privately owned reclaimed water system that requires a permit issued by the Department pursuant to 314 CMR 20.00 is eligible for said permit provided that the applicant submits sufficient information with the permit application to demonstrate to the Department's satisfaction that:

- (a) A single entity comprised of all stakeholders is responsible for the operation of the reclaimed water system in compliance with 314 CMR 20.00 and the permit. For purposes of this requirement, the term stakeholders shall include all persons who propose to have their sewage treated by the reclaimed water system. Stakeholders may also include any persons who propose to use, sell, distribute, or offer for use, sale, or distribution the reclaimed water produced by the reclaimed water system in

accordance with 314 CMR 20.00.

(b) The entity will not change its organizational structure, or sell, assign or transfer the reclaimed water system without the prior written approval of the Department.

(c) The entity owns the land on which the privately owned reclaimed water system is located and owns land and has easements that provide access to said land, the wastewater collection system, the reclaimed water distribution system and the land on each side.

(d) All stakeholders share in the financial and operational responsibilities for complying with the requirements of 314 CMR 20.00 and the permit.

(e) The entity responsible for the operation of the reclaimed water system in accordance with 314 CMR 20.00 and the permit shall have the authority to institute a user charge system sufficient to generate adequate revenue and to enforce such assessments against users in a manner equivalent to a municipal fee, tax or betterment assessment. The user charge system may apply to users whose sewage is treated by reclaimed water system for treatment and consumers who use, sell, distribute, or offer for use, sale or distribution the effluent produced by the reclaimed water system as reclaimed water in accordance with 314 CMR 20.00.

20.15: Signatories to Permit Applications, Reports and other Submittals

(1) All applications for a reclaimed water system permit issued by the Department pursuant to 314 CMR 5.00 shall be signed in accordance with 314 CMR 5.14. All applications for a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 shall be signed as follows:

(a) For a corporation or limited liability corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function and duly authorized by its Board of Directors, or any other person who performs similar policy or decision making functions for the corporation or to whom authority to sign such documents has been assigned or delegated in accordance with corporate procedures;

(b) For a partnership or limited partnership, by a general partner;

(c) For a sole proprietorship by the proprietor; or

(d) For a municipality, other local government unit, or instrumentality or political subdivision of the State or Federal government: by a principal executive officer, ranking elected official or other person with legal authority to sign such documents.

(2) Reports. All reports and other information required by 314 CMR 20.00 or a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 and other information requested by the Department shall be signed by a person described in 314 CMR 20.15(1), or by

a duly authorized representative of that person. A person is a duly authorized representative only if:

(a) The authorization is made in writing by a person described in 314 CMR 20.15(1); and

(b) The written authorization is submitted to the Department.

(3) Certification. Any person signing a document under 314 CMR 20.15(1) or (2) shall make the following certification:

"I [name] attest under the pains and penalties of perjury that I have personally examined and am familiar with the information contained in this document and all attachments, and that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained in this submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am authorized to make this attestation on behalf of this permittee. I am aware that there are significant penalties for submitting false, inaccurate or incomplete information, including but not limited to the possibility of fine and imprisonment for knowing violations."

20.16: Continuation of an Expiring Permit that was issued by the Department pursuant to 314 CMR 20.00.

(1) The condition of a reclaimed water system permit issued by the Department pursuant to 314 CMR 5.00 continue in force beyond the expiration date as provided in 314 CMR 5.08.

(2) The conditions of a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 continue in force beyond the expiration date pursuant to M.G.L. c. 30A, § 13, if:

(a) The permittee has made a complete and timely application for a permit renewal or for a new permit pursuant to 314 CMR 20.10; and

(b) The Department does not renew the permit, issue a new permit, deny the application, or modify or revoke the permit on or before the expiration date of the expiring permit.

(3) Permits issued by the Department pursuant to 314 CMR 20.00 and continued under 314 CMR 20.16 shall remain fully effective and enforceable until the effective date of a permit renewal or new permit.

20.17: Special Permit Conditions

Special Conditions Except as otherwise provided in 314 CMR 20.17(5), and 314 CMR 20.17(7), each permit for a reclaimed water system issued by the Department pursuant to 314

CMR 5.00 or 314 CMR 20.00 shall identify the class of the reclaimed water and specify effluent limits, and authorized uses in accordance with 314 CMR 20.17. The permit shall assign the reclaimed water produced by the reclaimed water system to one of the classes listed below based upon the level of treatment and the concentration of the pollutants. The classification shall limit how the reclaimed water may be used. If more than one use is proposed, the permit shall provide that reclaimed water meet the effluent limits associated with the most stringent classification. As more fully set out below, the classes are Class A, Class B, and Class C.

(1) Class A – Class A reclaimed water is reclaimed water that at all times it meets or exceeds the effluent limits in 314 CMR 20.17 (1)(b).

(a) Uses - Class A reclaimed water may be used for any activity that Class B reclaimed water or Class C reclaimed water may be used as set forth in 314 CMR 20.17 (2) and (3). Class A reclaimed water may be used for the following additional activities:

1. Irrigation Class A reclaimed water may be used for irrigation at locations where individual members of the public are likely to come into contact with the reclaimed water including without limitation:
 - i. Golf courses;
 - ii. Parks and playgrounds;
 - iii. Landscaping around schools, colleges, and universities;
 - iv. Landscaping around residential and mixed used developments;
 - v. Athletic fields;
 - vi. Cemeteries; and
 - vii. Highway rest areas.
2. Cooling water: Class A reclaimed water may be used for industrial or commercial cooling or air conditioning where aerosols or other mists are created, including without limitation cooling towers, evaporative condensers, or spray mechanisms. When a cooling system uses Class A reclaimed water in conjunction with an air conditioning facility that utilizes a cooling tower or otherwise creates a mist that may come into contact with employees or members of the public, the cooling system shall comply with the following:
 - i. A drift eliminator shall be used whenever the cooling system is in operation.
 - ii. Chlorine, or other, biocide shall be used to treat the cooling system recirculating water to minimize the growth of LEGIONELLA and other microorganisms.
3. Toilet and urinal flushing. Class A reclaimed water may be used for toilet and/or urinal flushing in commercial, institutional, and industrial facilities and buildings including hotels and motels. Class A reclaimed water may also be used for toilet and/or urinal flushing in barracks, jails, prisons, reformatories, and residential developments other than single family homes, town houses, and two and three family homes where the residents have access to the plumbing facilities for repairs or modification. All facilities using Class A reclaimed water for toilet and/or urinal flushing shall comply with the Massachusetts

Uniform State Plumbing Code, 248 CMR 10.00.

4. Agricultural use: Class A reclaimed water may be used for food crop irrigation where there is contact between the reclaimed water and the edible portion of the crop.
5. Industrial process water: Class A reclaimed water may be used as industrial process water where inhalation or contact is possible.
6. Commercial laundries and carwashes: Class A reclaimed water may be used by commercial laundries and carwashes.
7. Snowmaking: Class A reclaimed water may be used for snowmaking.
8. Fire protection: Class A reclaimed water may be used for fire protection.

(b) Effluent Limits: The following effluent limits apply to all Class A reclaimed water. The compliance point(s) shall be after the final treatment process and prior to the point of discharge:

Effluent Limits

pH = 6.5-8.5
 BOD \leq 10 mg/l
 TSS \leq 5 mg/l
 Turbidity \leq 2 NTU
 Total Nitrogen \leq 10 mg/l
 Median of no detectable fecal coliform/100 ml over continuous 7-day sampling periods, not to exceed 14/100 ml in any one sample
 Other parameters as specified by the Department

On a case-by-case basis, the Department may establish a limit on phosphorous and/or establish a limit on total nitrogen that is more stringent than 10 mg/l in order to maintain or achieve compliance with the water quality standards set forth in 314 CMR 4.00 and/or to protect the actual or potential use of the ground water as a source of potable water. On a case-by-case basis, the Department may establish a limit on total nitrogen that is less stringent than 10 mg/l, if the use of the reclaimed water does not involve a discharge to the ground surface or the ground water or in circumstances such as irrigation where the nutrient value of the reclaimed water is proposed to be used and the reclaimed water meets the effluent limit of 10 mg/ l before it is discharged to the ground water.

(2) Class B – Class B reclaimed water is reclaimed water that at all times it meets or exceeds the effluent limits in 314 CMR 20.17(2)(b).

(a) Uses – Class B reclaimed water may be used for any activity that Class C reclaimed water

may be used as set forth in 314 CMR 20.17(3). Class B reclaimed water may be used for the following additional activities:

1. Irrigation: Class B reclaimed water may be used for irrigation at locations where individual members of the public are not likely to come into contact with the reclaimed water including without limitation the following:
 - i. Ornamental nursery stock and sod farms where access by the general public is restricted;
 - ii. Non-residential developments, such as office complexes, public buildings, hotels, motels, and commercial malls; and
 - iii. Landscaped areas associated with highways, other than highway rest areas, including without limitation median strips and shoulders.
 2. Cooling water: Class B reclaimed water may be used for industrial or commercial cooling or air conditioning where aerosols or other mist are not created.
 3. Agricultural use: Class B reclaimed water may be used to provide irrigation for the following agricultural uses:
 - i. Class B reclaimed water may be used for irrigation on land used as pasture for milking animals; and
 - ii. Class B reclaimed water may be used for irrigation of unprocessed food crops where there is no contact between the reclaimed water and the edible portion of the crop.
 4. Creation of wetlands and recreational impoundments: Class B reclaimed water may be used to create a new wetland or recreational impoundment. Discharge of treated wastewater to an existing surface water or wetland requires a Surface Water Discharge Permit issued by the Department pursuant to 314 CMR 3.00 and does not involve the reuse of reclaimed water under 314 CMR 20.00.
 5. Dust control: Class B reclaimed water may be used for dust control.
 6. Soil compaction: Class B reclaimed water may be used for soil compaction.
 7. Mixing concrete and washing aggregate: Class B reclaimed water may be used to mix and wash aggregate.
 8. Street cleaning: Class B reclaimed water may be used for street cleaning.
- (b) Effluent Limits: The following effluent limits apply to all Class B reclaimed water. The compliance point(s) shall be after the final treatment process and prior to the point of discharge:

Effluent Limits

pH = 6.5-8.5
 BOD \leq 30 mg/l
 TSS \leq 10 mg/l
 Turbidity \leq 5 NTU
 Total Nitrogen \leq 10 mg/l
 Median of 14 detectable fecal coliform/100 ml over continuous 7-day sampling periods, not to exceed 100/100 ml in any one sample
 Other parameters as specified by the Department

1. On a case-by-case basis, the Department may establish a limit on phosphorous and/or establish a limit on total nitrogen that is more stringent than 10 mg/l in order to maintain or achieve compliance with the water quality standards set forth in 314 CMR 4.00 and/or to protect the actual or potential use of the ground water as a source of potable water. On a case-by-case basis, the Department may establish a limit on total nitrogen that is less stringent than 10 mg/l if the reclaimed water use does not involve a discharge to the ground surface or the ground water, or in circumstances such as irrigation where the nutrient value of the reclaimed water is proposed to be used and the reclaimed water meets the effluent limit of 10 mg/l before it is discharged to the ground water.

3. Class C – Class C reclaimed water is reclaimed water that at all times it meets or exceeds the effluent limits set forth in 314 CMR 20.17(3)(b).

(a) Uses – Class C reclaimed water may be used for the following activities:

- a. Agricultural use: Class C reclaimed water may be used for orchard and vineyard irrigation where there is no contact between the reclaimed water and the edible portion of the crop, and for processed food crops that undergo commercial pathogen-destroying processing before consumption by humans.
- b. Industrial process water: Class C reclaimed water may be used as industrial process water in a closed system where there is no worker contact.
- c. Industrial boiler feed: Class C reclaimed water may be used to feed an industrial boiler.
- d. Silviculture: Class C reclaimed water may be used for silviculture.

(b) Effluent Limits: The following effluent limits apply to all Class C reclaimed water. The compliance point(s) shall be after the final treatment process and prior to the point of discharge:

Effluent Limits

pH = 6.5-8.5
 BOD \leq 30 mg/l
 TSS \leq 30 mg/l
 Turbidity \leq 10 NTU
 Total Nitrogen \leq 10 mg/l
 Median of 200 detectable fecal coliform/100 ml over continuous 7-day sampling periods, not to exceed 800/100 ml
 Other parameters as specified by the Department

On a case-by-case basis, the Department may establish a limit on phosphorous and/or establish a limit on total nitrogen that is more stringent than 10 mg/l in order to achieve or maintain compliance with the water quality standards set forth in 314 CMR 4.00 and/or to protect the actual or potential use of the ground water as a source of potable water. On a case-by-case basis, the Department may establish a limit on total nitrogen that is less stringent than 10 mg/l if the reclaimed water use does not involve a discharge to the ground surface or the ground water, or in circumstances such as irrigation where the nutrient value of the reclaimed water is proposed to be utilized, and the effluent limit of 10 mg/l is met before it is discharged to the ground water.

(4) Special Operational Conditions

- (a) Except as provided in 310 CMR 20.17(4)(b), the permittee shall maintain a chlorine residual of at least 0.5 mg/l in the reclaimed water during conveyance from the wastewater treatment facilities to each reuse site. For reuse sites that are not under the control of the permittee, the Service and Use Agreement shall provide the permittee with sufficient access to the reclaimed water distribution system and the reuse site to ensure compliance with this requirement.
- (b) Maintenance of a chlorine residual in accordance with 310 CMR 20.17(4)(a) is not required in reclaimed water impoundments and storage basins. The Department may waive the chlorine residual requirement set forth in 310 CMR 20.17(4)(a) for reclaimed water distributed from reclaimed water impoundments and storage basins, if the Department determines that maintenance of a chlorine residual is not necessary for the protection of the public health or the environment.

(5) Special Conditions for Use of Reclaimed Water for Aquifer Recharge by Discharging Reclaimed Water Within a Zone II, Interim Wellhead Protection Area or Area Outside the Service Area of a Public Water System

A permit issued by the Department pursuant to 314 CMR 5.00 authorizing the use of reclaimed water for aquifer recharge by allowing the discharge of reclaimed water to the ground within a Zone II, Interim Wellhead Protection Area or area outside the service area of a public water system shall not assign the reclaimed water to a class. Instead, the permit shall require that the reclaimed water meet the effluent limits set forth in 314 CMR 5.10(4A).

(6) Special Conditions for the Outside Use Of Reclaimed Water Within a Zone II, Interim Wellhead Protection Area or Area Outside the Service Area of a Public Water System.

A permit issued by the Department pursuant to 314 CMR 5.00 or 314 CMR 20.00 authorizing the outside use of reclaimed water within a Zone II, Interim Wellhead Protection Area, or an area that is outside the service area of a public water system shall meet the more stringent of the effluent limits set forth in 314 CMR 5.10(4A) and the effluent limits set forth in 314 CMR 20.17 for the particular outside use and the class associated with that use. Outside uses of reclaimed water include snow making, fire protection, dust control, street cleaning, soil compaction, mixing concrete, washing concrete and irrigation other than irrigation by means of a soil absorption system approved by the Department in accordance with 314 CMR 5.00.

(7) Special Conditions for Use of Reclaimed Water For Irrigation By Means of a Soil Absorption System Approved by the Department Pursuant to 314 CMR 5.00.

A permit issued by the Department pursuant to 314 CMR 5.00 authorizing the use of reclaimed water for irrigation by means of a soil absorption system approved by the Department in accordance with 314 CMR 5.00 shall not assign the reclaimed water to a class. Instead, the permit shall require the reclaimed water to meet effluent limits established in accordance with 314 CMR 5.10.

(8) Special Conditions for Use of Reclaimed Water for Irrigation By Means of a Discharge to the Ground Within 100 Feet of an Irrigation Well.

A permit authorizing issued by the Department pursuant to 314 CMR 5.00 authorizing the use of reclaimed water for irrigation by means of a discharge to the ground within 100 feet of an irrigation well shall require the reclaimed water to meet the more stringent of the effluent limits established in accordance with 314 CMR 5.10(2) through 314 CMR 5.10(4A) and the effluent limits established in accordance with 314 CMR 20.17 for the particular irrigation use and the class associated with that use.

(9) Special Conditions for Reclaimed Water Used For Irrigation.

Except as otherwise provided herein, a permit that authorizes the use of reclaimed water for irrigation shall include the following additional conditions:

- a. The permittee shall develop and implement a public education program as approved by the Department in accordance with the schedule approved by the Department.
- b. The permittees shall not use reclaimed water other than Class A reclaimed water for spray irrigation within 100 feet of any building or residence, or 50 feet if a hedge buffer is used.
- c. The permittee shall not spray reclaimed water on paved or impermeable areas.
- d. The permittee shall not use reclaimed water, other than Class A reclaimed water for spray irrigation within 100 feet of a place where public exposure could be similar to a park,

playground or school yard.

The conditions set forth above shall not apply to a permit issued pursuant to 314 CMR 5.00 that authorizes the use of reclaimed water for irrigation by means of a subsurface soil absorption system approved by the Department.

(10) Other Special Conditions

The Department shall establish special permit conditions, as required on a case by case basis to provide and assure compliance with the applicable requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated thereunder, the Federal Act, 31 U.S.C. 1251 et seq. and the regulations promulgated thereunder and pertinent provisions of other state and federal laws. At a minimum, all reclaimed water system permits shall contain limits that are adequate to assure and maintain compliance with the state's water quality standards, to protect surface waters for their existing and designated uses, and/or the ground waters of the Commonwealth as an actual or potential source of potable water and to assure compliance with pertinent provisions of state and federal law, the Department may include in a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 or 314 CMR 5.00 additional effluent and monitoring requirements including without limitation effluent limits and monitoring requirements for contaminants that as of *date* (effective date of regulations) are not regulated by the Drinking Water Regulations of Massachusetts, 310 CMR 22.00. The Department may also require the implementation of specific source control and pollution prevention measures and other best management practices aimed at protecting water quality, the public health and the environment.

20.18 General Permit Conditions.

- (1) The following reclaimed water system permits issued by the Department pursuant to 314 CMR 5.00 shall have the general permit conditions set forth in 314 CMR 5.19 whether or not said conditions are expressly incorporated into the permit: permits that authorize the discharge of treated wastewater within a Zone II, Interim Wellhead Protection Area, or area outside the service area of a public water system and thus permit the use of reclaimed water for aquifer recharge and permits that authorize the use of reclaimed water for irrigation by means of a subsurface soil absorption system approved by the Department.
- (2) All other reclaimed water systems issued by the Department pursuant to 314 CMR 5.00 and all reclaimed water system permits issued by the Department pursuant to 314 CMR 20.00 shall have the conditions set forth in 314 CMR 20.18(2)(a)-(p), whether or not said conditions are expressly incorporated into the permit.
 - (a) Beginning on the effective date and lasting through the expiration of the permit, the permittee is authorized to use, sell, distribute, and offer for use, sale, or distribution reclaimed water only in accordance the permit, 314 CMR 20.00, the Uniform State Plumbing Code, 248 CMR 10.00, and a Reuse Management Plan approved by the Department.
 - (b) The use, sale, distribution, or offering for use, sale, or distribution of reclaimed water

other than as expressly authorized by the permit, 314 CMR 20.00 and a Reuse Management Plan approved by the Department is prohibited.

(c) The permittee shall at all times operate and maintain the facilities used to produce, and/or distribute reclaimed water in accordance with the permit, 314 CMR 20.00, the approved Operations and Maintenance Plan, the approved Reuse Management Plan, 314 CMR 12.00, 257 CMR 2.00 and 314 CMR 20.00.

(d) In the event that the permittee proposes to reuse reclaimed water for a use at a reuse site, by a person, or for a purpose that is not identified in the approved Reuse Management Plan, and/or not authorized by this permit, the permittee shall notify the Department in writing of the proposed change and request modification of the permit. The permittee shall not commence the proposed use, unless and until the permit has been modified and the use has been approved by the Department in writing.

(e) The permittee shall give prior notice to the Department as soon as possible of any planned physical alterations or additions to the treatment works or any activity that could significantly change the nature or increase the quantity of pollutants in the reclaimed water. The permittee shall not make the proposed alteration or construct the proposed addition, unless and until it is approved in writing by the Department.

(f) The permittee shall notify the Department of any non-compliance with the requirements of 314 CMR 20.00 that may endanger the public health or the environment within 24 hours from the time that the permittee became aware of the noncompliance. Said notice may be oral or by facsimile or email. A written submission shall also be submitted to the Department within five days of the time that the permittee became aware of the non-compliance. The written submission shall contain a description of the non-compliance including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue and the steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.

(g) The permittee shall allow the Department and its authorized representatives to enter upon the permittee's premises where an activity related to the production, use, sale, or distribution of the reclaimed water is located or conducted or where records required by the permit are kept. The Department shall have access to inspect and copy at reasonable times any records that must be kept by the permittee under the conditions of the permit, inspect at reasonable times any facilities, equipment, practices or operations regulated or required under the permit, and sample or monitor the reclaimed water at reasonable times for the purpose of determining compliance with the terms and conditions of the permit.

(h) There shall be no bypassing of untreated or partially treated wastewater to the reclaimed water distribution system or to any reuse site at any time. The reclaimed water produced by the reclaimed water system shall at all times meet the requirements of its classification and use including without limitation the requirements set forth in 314 CMR 20.17. Reclaimed water that does not meet the requirements of its classification and use shall be diverted from the reclaimed water distribution system to an alternate discharge

location, to a sewer system with a discharge at another location or to storage facilities and managed in accordance with all applicable regulations.

(i) The permittee shall notify the Department by telephone, facsimile or email in accordance with subsection (f) within 24 hours of any time that the permittee discovers that the reclaimed water does not meet the requirements of its classification and use. Reclaimed water not meeting the requirements of its classification and use shall not be discharged to the reclaimed water distribution system or to any reuse site without the prior approval of the Department.

(j) At each reuse site, the public shall be notified that reclaimed water is being used and that the reclaimed water is not safe for drinking. This notification shall include the posting of signs of sufficient size to be clearly read at all reuse sites. For any reuse site that is under the direct control of the permittee, the permittee shall provide the required notice. For any reuse site not under the direct control of the permittee, this requirement shall be expressly included in a Service and Use Agreement. The Service and Use Agreement shall provide that the permittee shall enforce this requirement and that the Department has authority under 314 CMR 20.00 to enforce this requirement.

(k) The permittee shall develop and implement a cross connection control inspection and testing program that contains all the components of a cross connection program established pursuant to 310 CMR 22.22 and that ensures compliance with the Massachusetts Uniform Plumbing Code, 248 CMR 10.00, at each reuse site. A registered cross connection prevention device or cross connection control method that meets the requirements of 310 CMR 22.22 and the Massachusetts Uniform Plumbing Code, 248 CMR 10.00, shall be provided at all potable water system connections to reuse sites.

(l) The permittee shall not distribute reclaimed water to a person or offer reclaimed water for use, sale or distribution by another person without a Service and Use Agreement between said person and the permittee that has been approved by the Department in writing. The permittee shall not distribute reclaimed water to a satellite reclaimed water system for further distribution by that system unless there is a Service and Use Agreement approved by the Department between the owner of the satellite reclaimed water system and each user of the reclaimed water in writing. The permittee shall submit all required Service and Use Agreements to the Department for its review and approval before they are signed.

(m) Duty to mitigate: The permittee shall take all reasonable steps to minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with the permit or 314 CMR 20.00.

(n) Duty to Halt or Reduce Activity: Upon reduction, loss or failure of a component of the treatment works, the permittee shall control the production, use, sale and distribution of reclaimed water to the extent necessary to maintain compliance with its permit, the approved Reuse Management Plan and 314 CMR 20.00 until the affected component is restored or an alternative component is provided. It shall not be a defense to an

enforcement action for a permittee to maintain that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a condition of the permit, the approved Reuse Management Plan, and 314 CMR 20.00.

(o) Power Failure: In order to maintain compliance with all the terms and conditions of the permit, the permittee shall provide an alternative power source sufficient to operate the entire treatment works. In the event of the failure of the alternative power source, the permittee shall halt, reduce or otherwise control the production, use, sale or distribution of the reclaimed water upon the reduction, loss or failure of the primary source of power to the treatment works or any component thereof.

(p) Reclaimed water may not be used in a manner that will cause or contribute to a violation of the Massachusetts Surface Water Quality Standards 314 CMR 4.00 or that will cause the water quality of any public or private water supply to violate the standards set forth in the Drinking Water Regulations of Massachusetts, 310 CMR 22.00.

(3) Additional General Conditions. The conditions set forth in 314 CMR 20.18 (a)-(j) apply to every reclaimed water system permit issued under 314 CMR 20.00 whether expressly incorporated therein.

(a) The permittee shall furnish to the Department within twenty-one (21) days any information that the Department may request to determine whether cause exists for modifying, revoking, renewing or terminating the permit or to determine whether the permittee has complied with or is complying with all the terms and conditions of the permit.

(b) Nothing in the permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under any federal or state law or regulation.

(c) Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner that is consistent with applicable Federal, State and local laws and regulations.

(d) Monitoring Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring shall be conducted according to the latest edition of Standard Methods for the Examination of Water and Waterworks prepared by the American Public Health Association, American Waterworks Association, and the Water Environment Federation, the latest edition of Methods for Chemical Analysis of Water and Wastes prepared by EPA, the latest edition of Water Standards of the American Society for Testing Materials, or other test procedures specified in the permit or approved by the Department. Analyses of samples shall be conducted at a laboratory certified by the Department.

(e) Record Keeping. The permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least

three years from the date of the sample, measurement, report or application. The period may be extended by request of the Department at any time. Records of monitoring information shall include, the date, exact place and time of sampling or measurement, the individual who performed the sampling or measurement, the date analyses were performed, the individual who performed the analyses, the analytical techniques or methods used, and the results of such analyses.

(f) Monitoring results shall be reported at the intervals specified in the permit. If the permittee monitors any pollutant more frequently than required by the permit, the results of this monitoring shall be included in the calculation and reporting of the data required by the permit. .

(g) Any permittee, other than a local government unit required to obtain a reclaimed water system permit issued by the Department pursuant to M.G.L.c. 21, § 42 and 314 CMR 20.00, shall be required annually to submit an annual compliance assurance fee in accordance with 310 CMR 4.00.

(h) The permittee shall submit to the Department for its review and approval an Operations and Maintenance Plan and Staffing Plan at least forty-five days prior to the date the reclaimed water system commences operation or the use of the reclaimed water commences, whichever first occurs. The Operation and Maintenance Plan shall document how the permittee intends to operate and maintain and staff the reclaimed water system in accordance with all applicable requirements including the permit, 314 CMR 20.00, 257 CMR 2.00, and 314 CMR 12.00. The Operation and Maintenance Plan shall include a preventative maintenance program to ensure that all equipment is kept in a reliable condition. The Operation and Maintenance Plan shall include a plan to staff the reclaimed water system in accordance with all applicable regulations including without limitation 257 CMR 2.00. The Operation and Maintenance Plan shall also include an emergency contingency plan that establishes standard operating procedures that must be followed when the reclaimed water does not meet the applicable effluent limits.

(i) The permittee shall submit a revised Operation and Maintenance Plan whenever there are modifications to the reclaimed water system, the standard operating procedures for the system or the staff of the reclaimed water system.

(j) The permittee shall not implement any changes to the reclaimed water system, unless and until the Department approves the revised Operations and Maintenance Plan required by the permit.

(k) If the permittee intends to enter into a contract with a third party (the “contract operator”) for the operation and maintenance of the reclaimed water system, at least forty-five days prior to the date the system commences operation, the permittee shall submit a draft unsigned contract to the Department for its review and approval. The contract shall provide that the contract operator shall operate and maintain the reclaimed water system in accordance with the approved Operation and Maintenance Plan and Staffing Plan, 314 CMR 20.00, 314 CMR 12.00, and 257 CMR 2.00. The permittee shall not execute the contract and authorize the contract operator to commence operation of the reclaimed water system unless and until the

Department has approved the contract.

20.19 Modification, Transfer, Suspension, Revocation and Renewal of Reclaimed Water System Permits Issued by the Department Pursuant to 314 CMR 20.00

(1) The Department may propose and determine to modify, suspend, or revoke any outstanding reclaimed water system issued by the Department pursuant to 314 CMR 5.00 in accordance with 314 CMR 5.12. The Department may propose and determine to modify, suspend or revoke any outstanding reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00, in whole or in part, for cause including, but not limited to, violation of any permit term, obtaining a permit by misrepresentation or failure to disclose fully all relevant facts or any change in or discovery of conditions that calls for reduction or discontinuance of the authorized activity. The Department may also modify a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 at the request of the permittee upon a showing, satisfactory to the Department that the requested modification is appropriate in view of circumstances for which the permittee is not at fault.

(2) The modification, except for minor modification, suspension, revocation or renewal of a reclaimed water system permit issued by the Department pursuant to 314 CMR 20.00 shall be processed in accordance with the provisions of 314 CMR 2.10.

(2) Minor Modifications, including Transfer of Permits. Upon the consent of the permittee, the Department may make the following modifications to a reclaimed water system issued by the Department pursuant to 314 CMR 20.00 without following the procedures of 314 CMR 2.00:

(a) Correct typographical errors;

(b) Change the monitoring provisions to require more frequent monitoring or reporting by the permittee or require monitoring for additional pollutants or monitoring at additional monitoring locations;

(c) Transfer the Permit to a new permittee if:

1. The Department receives written notice of the transfer from the current permittee of the transfer at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittee which includes a specific date for transfer of the permit and the transferee's assumption of responsibility for compliance with the permit, and any allocation of liability and financial responsibility between them; and
3. The Department approves the transfer in writing. The transfer shall take effect on the date the transfer is approved by the Department.

20.20: Appendix A

DO NOT DRINK SIGN